



DECEMBER MEETING

At press time, details of the December 2004 Section Meeting were still being finalized. Please check the Section Web Page (<http://ieee.cincinnati.fuse.net/>) or call the Section Voice Mail (513-629-9380) for information.

CHAIR'S MESSAGE

by Fred Nadeau, Section Chair

I want to thank you for allowing me to serve you as your chair for the last two years. It has been an honor and a privilege to work with such talented and dedicated people that we have in the Cincinnati Section. I have had an extraordinary Executive committee to assist me in these two years and wish to thank them and all the Section members for your support. I certainly hope I have provided you with the high quality technical meetings and company tours you have come to expect. I hope you support the new 2005 chair as well as you have me.

I want to take this opportunity to wish you and your families happy and safe holidays and hope to see you all next year.

Fred Nadeau, Section Chair

E-mail: f.nadeau@ieee.org

Phone No. 937-289-2800

NEW MEMBERS

The following individuals are IEEE members who are new to our Section:

Alan B. Bailey	Jason Fischer	Jason E. Obermeyer
David J. Balogh	Anurag Gupta	Michael J. Schroder
Shubhankar Basu	Christopher D. Hicks	Emily Voellmecke
Stephen J. Bement	Tarun Joshi	Eric D. Vollrath
Jon C. Blevins	Joseph A. Kline	Adam Wagner
Shareef M. Dabdoub	Parineeta Kuntamukkala	Chih-Kuan Wang
Scott A. Dungan	Tony Lippolis	Zhen Ye
Chuck Dunn	Robert Muncy	

We wish to welcome these new members to our Section!!!

Scanning the Past: A History of Electrical Engineering from the Past

Submitted by Dick Reiman, Historian

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Alfred N. Goldsmith

Sixty five years ago this month, the PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS (IRE) included a paper by Alfred N. Goldsmith concerning the need for greater cooperation between the IRE and the radio-electronics industry. At the time he was Chief Broadcast Engineer of the Radio Corporation of America (RCA) and also the President of the IRE.

In his paper, Goldsmith asserted that the field of radio communication had reached a point where more systematic development could be planned through closer cooperation between engineers and industry management. He pointed out that engineers who were IRE members benefited both from attending meetings and from reading PROCEEDINGS papers. He observed that what they gained became a valuable asset to the companies which employed them. He suggested that companies should do their part to facilitate this process by permitting timely release of new technical information and by encouraging publication of PROCEEDINGS papers by their research engineers. He stated that the information published became the "capital of the engineers of tomorrow." He characterized the IRE as an international professional society whose membership included most leading communications engineers from "Singapore to Saskatchewan and from Paris to Portland."

Goldsmith was born in New York City in 1887 and graduated from the College of the City of New York (CCNY) in 1907. In 1911 he received the Ph.D. degree from Columbia University where he studied under Michael I. Pupin. Goldsmith taught at CCNY from 1906 to 1923. Along with Robert Marriott and John V. L. Hogan, Goldsmith negotiated the merger of the Wireless Institute and the Society of Wireless Telegraph Engineers to form the IRE in 1912. He became the first Editor of the PROCEEDINGS, which began publication in 1913, and except for his year as IRE President, continued as Editor through 1954. Thus he devoted most of his working career to the IRE and the PROCEEDINGS which became the preeminent archival journal in communication and electronic engineering during his long tenure.

During World War I, Goldsmith became a Consultant on radio to the General Electric Company and also was in charge of radio schools for the Army Signal Corps and the Navy at CCNY. In 1918 he published a classic book entitled *Radio Telephony* which contained comprehensive technical information on radio systems in use or under development all over the world. In the introduction he wrote that "communication is the life blood of civilization, of international good will, and of progress." In a 1921 paper entitled "World Communication," he described "an ideal system" which "would be a continuously operative interference-free person-to-person network" which "should include every person of the globe" in a network combining wire and radio.

In 1918 Goldsmith became Research Director of the Marconi Wireless Telegraph Company of America and the following year was named Director of the Research Department of the newly founded RCA. He remained with RCA in various capacities including Vice President until 1933 when he became an independent consultant. He served on the National Television Systems Committee which recommended standards for commercial television adopted by the Federal Communications Commission in 1941. Goldsmith received the IRE Medal of Honor in 1941 and the Founders Award of the IRE in 1954. He was the first recipient of the Haraden Pratt Award of the IEEE in 1972. This award recognized him for his outstanding record of service to the Institute which "no one has performed so well, for so long a time, with such unswerving devotion to truth and excellence." He received 122 United States patents covering inventions mostly related to radio, television, and facsimile broadcasting and receiving systems. He attended his last meeting of the IEEE Board of Directors in March 1972 and died in St. Petersburg, FL, in July 1974. He left a generous bequest from his estate to the IEEE Foundation.

James E. Brittain
School of History, Technology, and Society, Georgia Institute of Technology

IEEE 2005 CINCINNATI SECTION BALLOT

Election of Officers for Term Beginning 1/1/05 and Ending 12/31/06

SECTION CHAIR

☐ Jim Everly ☐ Write-In _____

SECTION VICE-CHAIR

☐ Steve Olenick ☐ Write-In _____

TREASURER

☐ Laurie Tappel ☐ Write-In _____

SECRETARY

☐ Ron Harbaugh ☐ Write-In _____

MEMBER-AT-LARGE

☐ Brian J. Resnick ☐ Write-In _____

Résumés of the above Candidates are on the next page.

Please return the ballot by: **DECEMBER 17, 2004**

Return the completed ballot to Bob Morrison (Newsletter Editor)
at j.r.morrison@ieee.org or via regular mail to:

J. R. Morrison
4472 Oakville Drive
Cincinnati, Ohio 45211

Member Name: _____

Member Number: _____

Résumés of Candidates

JIM EVERLY (SECTION CHAIR) - BSEE and MSEE, Ohio State University; Currently Associate Professor of Electrical Engineering Technology, University of Cincinnati; Department Head of EET at UC 1985 to Spring, 1990; Prior Employment as Manager of Signal Processing/Simulation, Calspan Corp., Dayton, Ohio. And Manager, Systems Analysis Group, Cincinnati Electronics, Cincinnati, Ohio; Member Eta Kappa Nu and ASEE; IEEE Cincinnati Section Vice Chairman 1992 and Secretary 1991.

STEVE OLENICK (SECTION VICE-CHAIR) – COO for the Nova Systems Solutions (NSS) Division of Nova Engineering, a 100% employee owned small business. NSS focuses on Software Defined Radios (SDRs) for both the military and commercial wireless communications industries. BSEE from Youngstown State University, 1972; MSEE from Fairleigh Dickinson University, 1976; MBA from the University of Cincinnati, 2002 and graduate course work at NJIT, 1977. Previous positions included: Director of Programs, Nova Engineering; Research and Development Manager, Cincinnati Electronics Corp.; Group Leader, CMC Electronics; New Business Manager, ITT Avionics; and a Member of the Technical Staff for the US Army CECOM. Member of Armed Forces Communications and Electronics Association (AFCEA) and a Senior Member of the IEEE; Organized Professional Development Seminars for the Fort Monmouth AFCEA Chapter; Published/Presented at MILCOM 86 and TCC 92; One Patent. He has held the positions of Chairman, Vice Chairman, Secretary and Member-at Large of the Executive Committee in the Cincinnati Section of IEEE in previous years.

LAURIE TAPPEL (TREASURER) - BSEE University of Dayton, 1984; MBA-Finance University of Cincinnati, 1989: Employed by Cincinnati Bell Telephone as an Advanced Service Developer, creating custom routing solutions for clients using the AIN (Advanced Intelligent Network) platform. Started at CBT in 1986 and has worked in various departments including Outside Plant and Network Planning. Began her engineering career at Harris Government Systems in Melbourne, Florida where she developed Satellite Modems.

RON HARBAUGH (SECRETARY) - University of Cincinnati, 1975, BS (Engineering Sciences). Employed by the City of Cincinnati for 31 years. Started in the Division of Telecommunications, which was within the Safety Department, and held the position of Assistant Superintendent (Section head) for several years. Primary responsibility for technical support of radio and 911 communications equipment. Secondary responsibilities include construction and technical support of the City's fiber optic network. Advanced to position of Superintendent of Telecommunications (Division Head) in 1997. Transferred to the position of Director of Police Communications (Cincinnati 911 Center) in December, 1997. Member of IEEE for 20 years and served in various positions in the Cincinnati Section. Former member of the Associated Public Safety Communications Officers (APCO) and held various posts. Retired in 2001.

BRIAN J. RESNICK (MEMBER-AT-LARGE) - Currently an Assistant Professor in the Department of Electrical and Computer Engineering Technology at the University of Cincinnati, College of Applied Sciences,. For the previous seventeen years, was the president of the software design and development firm Algorithmic Technologies, Inc. BSEE and MSEE from the University of Cincinnati. Professional Engineer. Eight Patents.

PE REVIEW COURSE FOR THE APRIL 2005 EXAM

NOTE: Some engineers take this review course and take the exam in October.

WHERE: University of Dayton Campus
DATES February 1 - April 7, 2004
Tuesday and Thursday evenings, 7:15 p.m. to 9:15 p.m.
FOR: Mechanical, Electrical and Civil Engineers
COST: \$ 725, including books and parking

TO REGISTER OR FOR MORE INFORMATION, call The University of Dayton at 937-229-4632

IEEE NEWS

THE LATEST ISSUE OF IEEE's "THE INSTITUTE" IS NOW AVAILABLE ON-LINE

The most current version of The Institute can be found at <http://www.ieee.org/theinstitute>

IN THIS ISSUE:

- "Getting Back" Rather Than "Giving Back": For many members, doing volunteer work for the IEEE is a way of giving back to a profession that has provided a satisfying career. IEEE Senior Member Daniel R. Benigni says volunteering has given him more than he could ever give back in return. Read more about Benigni at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/oct04/10w.profile.html>
- Radiation Detection Standards Available to the Public: Four new standards governing the design and testing of nuclear radiation detectors are available for downloading at no charge through the IEEE/ANSI N42 Radiation Detection Standards Program. Find out more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/oct04/10w.prodstand.html>
- Committee Sees Work on Ethical Issues Take Hold: New guidelines for handling plagiarism complaints have been rolled out this year with the help of the IEEE Ethics and Member Conduct Committee. In addition, in a bid to emphasize the role ethics should play in professional life, the committee has worked to set up student ethics competitions in all 10 IEEE regions. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/oct04/10w.ethics.html>
- Electron Devices Conference Celebrates 50 Years of Breakthroughs: For the last half-century top tech companies have come to the annual IEEE International Electron Devices Meeting to report their advances in semiconductors and electronic devices. This year's meeting, which takes place 13-15 December at the Hilton San Francisco Towers in San Francisco continues to be the leading forum for today's breakthroughs in microelectronics, molecular electronics, optoelectronics, and microelectromechanical systems. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/oct04/10w.conferenceIEDM.html>
- Asynchronous Circuits Conference Generates Timely Insights: The proceedings from the 2004 IEEE 10th International Symposium on Advanced Research in Asynchronous Circuits and Systems feature the latest research in techniques that improve the performance, power consumption, reliability, and design time of circuits. Available through ShopIEEE, the proceedings feature 21 peer-reviewed papers that track academic and industrial trends in asynchronous technology. To purchase the proceedings, visit <http://shop.ieee.org/store/product.asp?prodno=PR2133>

- 2006 IEEE Technical Field Award Nominations Due: Nominating forms for the 2006 IEEE Technical Field Awards are due 31 January 2005. To nominate a colleague, visit the IEEE Awards Web site at <http://www.ieee.org/about/awards> or contact IEEE Awards Activities, 445 Hoes Lane, Piscataway, N.J., USA, 08855-1331; telephone 1-732-981-9019 or write to awards@ieee.org
- Get Bonus Months on New Societies, Subscriptions: IEEE members can receive several free months of new society memberships and journal subscriptions if they act now during the 2005 renewal period. Any new society membership or journal subscription will be active for the rest of 2004. You can find details on all of the IEEE's societies and its more than 100 technical publications at <http://www.ieee.org/renewal>
- IEEE Web Account Needed to Access Online Communities: As of 15 November, members who participate in the IEEE Online Communities will have to use their IEEE Web account login to access the service. Users are urged to update their community profile with their member number and Web Account login name and password. For more information, visit <http://ieeecommunities.org>
- Michael Lightner Wins President-Elect Race: IEEE Fellow Michael Lightner is the 2005 IEEE President-Elect. He will succeed 2005 President W. Cleon Anderson on 1 January 2006. Lightner is a professor at the University of Colorado, Boulder, USA, the current IEEE Vice President of Publication Services and Products, and a member of the IEEE Board of Directors. For more election results, visit <http://www.ieee.org/portal/pages/newsinfo/index.html>
- Standard Unveiled for Motor Vehicle Black Box: So-called black boxes have been so reliable at gathering critical data from plane crashes that the devices have found their way, with little or no fanfare, into millions of cars and trucks. And in September, IEEE Standard 1616 was completed for black boxes or, as they are known more formally, motor vehicle event data recorders. This is the equipment that collects, records, stores, and has ready for readout data about a vehicle's operation. Find out more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.fblackbox.html>
- Vijay Bhargava Recognized by Royal Society of Canada: When IEEE Fellow Vijay Bhargava journeyed from his native India to Canada as an 18-year-old to study engineering at Queens University in Kingston, Ont., he had no intention of staying in North America. But 38 years later, he's still there. He's become a renowned educator and wireless technology pioneer. Recently, Bhargava's adopted country recognized his contributions to wireless technology by presenting him with the Royal Society of Canada's Thomas W. Eadie Medal. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.profilebhargava.html>
- IEEE Upgrades E-Mail Alias Spam Filter: Members who use the IEEE's personal e-mail alias service now have a tighter filter against spam. The filter allows users to create lists of e-mail addresses and domains from which they never want to receive mail (the black list), and addresses from friends and business associates (the white list) whose mail will always come through. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.prodspam.html>
- Marketplace of Ideas: A Technology Crystal Ball: For its 40th-anniversary issue in November, IEEE Spectrum editors looked at 10 soon-to-be-hot start-ups, analyzed electrical engineering's identity crisis, and sized up the magazine's past technology predictions to see which hit the bull's-eye and which missed the mark. In addition, a host of engineering pioneers, executives, and other luminaries were asked what new technologies they expected to see play important roles in the next 40 years. What important innovations do you think we'll see in the next four decades? Weigh in at institute@ieee.org Read the luminaries' answers at <http://www.spectrum.ieee.org/WEBONLY/publicfeature/nov04/1104lumi.html>

- Renovations Make Shopping Online Store Faster: Upgrades made to ShopIEEE, the online store, make finding and buying products easier and quicker. Although shoppers could always search for publications using key words like title or author, the new search engine allows for hazier queries such as a phrase or even a copyright year. Learn more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.prodshop.html>
- Share Your E-Week Celebration Plans: How will your Section or Chapter celebrate the 2005 U.S. National Engineers Week from 20-26 February? Let The Institute know. Send a description of your group's E-Week events, by 15 November to Editor Kathy Kowalenko at k.kowalenko@ieee.org so we may include your activities in an article.
- Member Digital Library Offers Incentive to New Subscribers: IEEE members who become new subscribers to the IEEE Member Digital Library during the member renewal period ending 31 December will receive their first month of service free. The monthly fee is US\$35. To start your IEEE Member Digital Library subscription or to renew your IEEE membership for 2005, visit <http://ieee.org/renewal> All memberships renewed online by 15 November will be entered into a drawing for a Dell notebook computer.
- Guiding Women to Engineering Careers. Women make up 46 percent of the workforce in the United States, yet they hold only 12 percent of the jobs in science, technology, engineering, and math. Hoping to attract more women to careers in engineering, a coalition of engineering associations and societies including the IEEE, together with the WGBH-TV Educational Foundation in Boston, have established the Extraordinary Women Engineers Project. Read more at <http://www.theinstitute.ieee.org/portal/pages/actionline/legacy/inst2004/nov04/11w.fproj.html>
- Service Offers Access From Anywhere to Personal Information. What happens if you're traveling abroad and lose your passport, or worse, get so sick you can't give the doctor a medical history? This is where a new document-storage service from the IEEE Financial Advantage Program can help. It stores copies of your important papers, including your medical records, for immediate transmission to wherever the information is needed. Find out more at <http://www.theinstitute.ieee.org/portal/pages/actionline/legacy/inst2004/nov04/11w.fap.html>
- Virtual Museum Exhibit Shows How Big Small Is. "Let's Get Small" traces the development of microelectronics starting with the invention of the transistor in the 1950s, tracks the miniaturization of electronics through integrated circuits and microprocessors, and ends with today's latest nanotechnology developments. This new exhibit, put together by the IEEE History Center and sponsored by the IEEE Foundation and the IEEE Life Member Committee also describes early vacuum-tube computers such as the ENIAC, which took up an entire room. Read more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.history.html>
- Marketplace of Ideas: A Technology Crystal Ball. The 40 years since the start of IEEE Spectrum magazine has seen countless innovations in electronics and technology. What important innovations do you think we'll see in the next 40 years? Weigh in at institute@ieee.org
- Conference Examines Networking and Consumer Electronics Trends. As the popularity of networking electronics gear grows in the home, so grows the ways of linking voice and computer communications with entertainment systems, home security, and more. The second annual IEEE Consumer Communications and Networking Conference to be held 3-6 January in Las Vegas, USA, will focus on the great variety of wired and wireless network communications systems and the trends in consumer

electronic applications and services. Find out more at <http://www.theinstitute.ieee.org/portal/pages/tionline/legacy/inst2004/nov04/11w.confcomsoc.html>

- ShopIEEE Has 25th Security and Privacy Symposium Proceedings. Even after 25 years, the IEEE Symposium on Security and Privacy continues to cover hot topics including electronic voting, cryptography, data integrity, anonymity and pseudonymity. The proceedings of the 25th symposium held 9-12 May 2004 in Berkeley, Calif., USA, have now been published and are available through ShopIEEE. For more information or to purchase these proceedings, visit http://shop.ieee.org/ieeestore/product.aspx?product_no=PR2136
- Nominate a Colleague for Fellow. It's time to start thinking about nominating a colleague who is a senior member for the 2006 class of IEEE Fellows. Nomination forms are due to the Nominations Committee by 1 March 2005. For the first time, you can submit nominations for a new category that recognizes members working in industry, including application engineers and engineers who have made significant contributions to the profession. To nominate an IEEE senior member for fellow status or to learn more about the process, visit <http://www.ieee.org/fellows>
- Help Boy Scouts Earn Electronics Merit Badge. Promote careers in technology to youngsters by volunteering to help Boy Scouts of America earn their electricity, electronics, or computer merit badge at the 2005 National Scout Jamboree to be held 25 July to 5 August 2005 in Caroline County, Va., USA. To volunteer, visit <http://www.emeritbadges.org/volunteers.htm>

THE LATEST ISSUE OF IEEE-USA's "TODAY'S ENGINEER" IS NOW AVAILABLE ON-LINE

The most current version of "Today's Engineer" can be found at <http://www.todaysengineer.org>

IN THIS ISSUE:

- Backscatter: The Hat Trick -- Having It Both Ways: Unless we have the latest version of an Internet Service Provider (ISP) program, we're considered technically disadvantaged..."My iPod can do more than yours" is an acceptable boast...As agents of change, engineers lay the foundations for disenchantment with the old, while helping popularize the new... Go to: <http://www.todaysengineer.org/2004/Nov/backscatter.asp>
- Fundamentals of Intellectual Property: Many employers and business managers today expect their engineers, designers and scientists to be sources of innovation that can be protected as a valuable asset. As an engineer, how can you obtain and maintain intellectual property rights? <http://www.todaysengineer.org/2004/Nov/IPfundamentals.asp>
- Self-Assessment: A Required Skill for Lifelong Learners: When you were in school, you had teachers to guide your learning. Even after graduation, we must consider pursuing learning for the rest of our professional lives. Now, though, we must be both teacher and student. Here's how. <http://www.todaysengineer.org/2004/Nov/self-assessment.asp>
- Tissue Engineering, Regenerative Medicine and Stem Cell Research: The Benefits and Controversies Ethical debate, research restrictions, a lack of research funding, migration abroad of experts and the absence of a clear strategic plan continue to constrain the full scientific potential of stem cell research and tissue engineering. These constraints have contributed to the loss of jobs for U.S. scientists, engineers and physicians, as well as to a loss of leadership in this health care field. http://www.todaysengineer.org/2004/Nov/tissue_engineering.asp

- Voice over Internet Protocol and the Changing Face of Communications: Voice over Internet Protocol is expected to ramp up quickly, possibly claiming more than 10 percent of worldwide telephony revenues in just five years. And while the government doesn't expect to be involved significantly in the transition, it will almost certainly have to get involved with the tax, law enforcement and regulatory issues that accompany the change. <http://www.todaysengineer.org/2004/Nov/voIP.asp>

Also in this issue:

- Your Engineering Heritage: The Voting Technology Evolution
- World Bytes: Golden Handcuffs
- Student Corner: On IEEE-USA Media Fellows
- Capitol Shavings: In My View -- On High-Tech Visas
- Member Opinion: On Defense Budget Waste
- Book Review: The Introvert Advantage
- Reader Feedback

U.S. IEEE MEMBERS ELECT PRESIDENT, 2006; MEMBER-AT-LARGE, 2005-2006

5 November 2004 - The results of the IEEE's 2004 annual election have been tallied, and U.S. IEEE members have elected Ralph W. Wyndrum, Jr., to serve as IEEE-USA President in 2006. Wyndrum, who enjoyed a successful 36-year career at AT&T and Bell Labs, currently leads Wyndrum Associates-Executive Consultants, consulting in the areas of R&D resource allocation and decision sciences targeted at new product service development. He also serves as business development director for SmartOrg, Inc., a start-up firm based in Menlo Park, Calif.; and he teaches a seminar on leadership, decision quality and strategic planning at Rutgers University. Wyndrum is a long-time IEEE volunteer and has held numerous IEEE-USA offices. For the past two years he has served as IEEE-USA's vice president for Technology Policy Activities. For more information on Wyndrum, visit: <http://www.wyndrum.com/election/>

Wyndrum will assume the role of president-elect on 1 January 2005, and will work with 2005 President Gerard A. Alphonse and current President John W. Steadman.

The IEEE's U.S. members also selected James M. Howard to serve as IEEE-USA Member-at-Large, 2005-2006. Howard, an electrical engineer with Lakeland Electric, a municipal electric company in Lakeland, Fla., will also take office on 1 January 2005.

Congratulations and good luck to our new officers! And thanks to our outgoing officers for their dedicated service to IEEE-USA!

For more information, and complete results of the IEEE annual election, please visit: <http://www.ieee.org/newsinfo/elections04.xml>

Please note that these election results, as certified by the IEEE Tellers Committee, are unofficial until the IEEE Board of Directors accepts the Report of the IEEE Tellers Committee at its 21 Nov. meeting.

Improving Exports Could Help EE Employment, IEEE-USA Webzine Says

WASHINGTON (12 November 2004) - The U.S. Department of Commerce (DOC) is working to help technology companies increase their exports, which could in turn open more employment doors for engineers and other workers, according to a recent article in the IEEE-USA Today's Engineer monthly Webzine.

"There's really a huge untapped market," said Neal Burnham, deputy assistant secretary of U.S. Commercial Services. "We estimate that 95 percent of the market for small companies is outside the United States."

The DOC's Commercial Services program includes exhibits by 39 government agencies that attend nearly three dozen major trade shows around the country. The agencies are putting a significant focus on China, where significant growth is expected. "It's a very dynamic place where they need a lot of things," Burnham said.

DOC officials note that companies increasing their exports usually increase their employee counts. That's a big positive in electronics, which continues to see shrinkage in employment despite signs of an economic up tick. A key benefit of the government efforts is that many services are free, while others have lower costs than similar services provided by companies in foreign countries, according to IEEE-USA Today's Engineer.

The entire article is available at <http://www.todaysengineer.org/July04/exports.asp>.

The IEEE Cincinnati Section Executive Committee **Member Names and Phone Numbers**

Cincinnati Section Voice Mail	513-629-9380 (call for meeting reservations)
Section Web Page	Http://ieee.cincinnati.fuse.net/
Fred Nadeau - Chair	937-289-2800, f.nadeau@ieee.org (E-mail)
Jim Everly - Vice Chair	513-556-4241, j.everly@ieee.org (E-mail)
Laurie Tappel - Treasurer	513-397-6383, laurie.tappel@cinbell.com (E-mail)
Ron Harbaugh - Secretary	513-769-3781, ron.harbaugh@ieee.org (E-mail)
Max Rabiee - PACE Chair	513-556-4202, max.rabiee@uc.edu (E-Mail)
Steve Olenick - Member-At-Large	513-554-2059 (Office), 513-642-3220 (Fax), steveo@nsseng.com (E-mail)
Marie Nemier - Member-At-Large	513-528-7900, Ext. 137, mnemier@trentec.com (E-mail)
Charlie Nash - Arrangements Chairman	513-723-3849, cnash@ieee.org (E-mail)
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Bob Morrison - Editor	513-287-3697 (Office), 513-287-4155 (Fax), j.r.morrison@ieee.org (E-mail)